

The opinion in support of the decision being entered today
is *not* binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JOSEPH REITHMEYER,
BRIAN BABKA, and TODD BRUCHU

Appeal 2007-1555
Application 09/900,442
Technology Center 3600

Decided: August 27, 2007

Before LINDA E. HORNER, ANTON W. FETTING, and JOSEPH A.
FISCHETTI, *Administrative Patent Judges*.

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DECISION ON APPEAL

STATEMENT OF THE CASE

Appellants Reithmeyer et al. seek our review under 35 U.S.C. § 134 of the
Examiner's final rejection of claims 1-15, 40-44, 47, and 48. Claims 16-39, 45,

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and 46 are withdrawn from consideration. We have jurisdiction under 35 U.S.C.
§ 6(b). (2002)

SUMMARY OF DECISION

We AFFIRM.

THE INVENTION

Appellants claim a hinged exterior entryway door system comprising a door slab, a frame and threshold which is said to interact with a rough opening to seal the structure to the penetration of weather and rain. (Specification: 1)

Claims 1 and 40, reproduced below, are representative of the subject matter on appeal.

1. An entryway system that can adjust a slab mounted within a frame and maintain a sealed system to exterior weather when closed, the entryway system comprising:

(a) the frame comprising a peripheral weather strip positioned substantially on the entirety of both sides and the bottom of the frame, the frame bottom additionally comprising a threshold member joined to the frame with an end cap corner key positioned between the frame and the threshold member, the threshold member forming a tank such that the threshold member can accumulate and drain environmental water to the exterior of the frame; and

(b) the slab including an adjustable hinge, said hinge

being vertically and horizontally adjustable to sealingly match the slab periphery to the peripheral weather strip.

40. An entryway system that can adjust a slab within a frame and maintain a sealed system to exterior weather when closed, the system comprising an entryway comprising:

(a) the frame comprising a header, a threshold, an end cap corner key, and at least one jamb, the threshold including:

(i) a water tank configured to drain environmental water to the exterior of the frame; and

(ii) a sealing element positioned between the end cap corner key and the water tank to seal the water tank; and

(b) the slab mounted on the frame, said slab comprising a mortised hinge arrangement,

said arrangement comprising a shim and a two-knuckle hinge, the two-knuckle hinge being adjustable in the vertical dimension.

THE REJECTION

The Examiner relies upon the following as evidence of unpatentability:

Hellstrom	US 4,381,580	May 3, 1983
Kurtz	US 4,639,971	Feb. 3, 1987
Headrick	US 5,136,814	Aug. 11, 1992
Taber	US 5,686,040	Nov. 11, 1997

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Snyder
Fehr

US 5,752,291
US 6,138,413

May 19, 1998
Oct. 31, 2000

The following rejections are before us for review.

1. Claims 1-3 and 8-13 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Headrick in view of Fehr, Hellstrom, and Snyder.
2. Claims 4-7 and 40-44 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Headrick in view of Fehr, Hellstrom, and Snyder as applied to claims 1-3 and 8-13 above, and further in view of Taber.
3. Claims 14 and 15 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Headrick in view of Fehr, Hellstrom, and Snyder as applied to claims 1-3 and 8-13.
4. Claims 47 and 48 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Headrick in view of Fehr, Hellstrom, and Kurtz.

ISSUES

The first issue before us is whether Appellants have sustained their burden of showing that the Examiner erred in rejecting the claims on appeal as being unpatentable under 35 U.S.C. § 103(a) over Headrick, Fehr, Taber, Hellstrom, and Snyder in that, as alleged by Appellants, there is no teaching, suggestion, or motivation to combine these references as proposed by the Examiner.

The second issue is whether the proposed modification under 35 U.S.C. § 103(a) to Headrick would render Headrick unsatisfactory for its intended purpose by modifying Headrick to include a seal around the entirety of both sides and the bottom of the frame thereby causing the threshold caps to be sealed against communication with the tank and hence prevent the egress of water from the tank.

FINDINGS OF FACT

We find the following facts by a preponderance of the evidence:

Headrick discloses the frame bottom comprising a threshold member 18 joined to the frame with an end cap corner key 36 positioned between the frame and the threshold member (Headrick col. 4, ll. 16-24, col. 5, ll. 1-2, Fig. 5).

Headrick discloses a weather or snugger strip 31 positioned at the bottom of the frame and functions as a gasket that helps reduce seepage of rainwater and other moisture at the interface between the bottom frame member e.g., the threshold cap and the channel wall, thus reducing the amount of water that seeps or leaks into the channel 13 (Headrick col. 4, ll. 52-56).

Headrick discloses the threshold member forming a gutter or tank 27 such that the threshold member can accumulate and drain environmental water out to the exterior of the frame (Headrick col. 5, ll. 29-40).

Headrick is silent with respect to the frame comprising a peripheral weather strip positioned substantially on the entirety of both sides and the bottom of the frame.

Fehr discloses a frame read as the profile shown in Fig. 1 comprised of members 15, 16, 17, and 19 (Fehr col. 8, ll. 9-11) and further comprises a peripheral weather strip 5 positioned substantially on the entirety of both sides 17, 19 and the bottom of the frame (Fehr col. 7, ll. 33-35, Fig. 2).

Fehr, Headrick, Snyder, and Hellstrom all disclose a slab/door mounted to a frame using a hinge connection. (Headrick col. 6, ll. 30-32); (Fehr col. 9, ll. 37-38); (Snyder col. 1, ll. 9-13); (Hellstrom col. 1, ll. 4-5).

Fehr discloses a tank 15e in the threshold member 15 such that the threshold member can accumulate and drain environmental water to the exterior of the frame via openings P1-P5 without need of channels formed in an end cap corner key (Fehr col. 8, ll. 31-46) .

Hellstrom discloses a vertically adjustable hinge as part of a slab/door assembly (Hellstrom, col. 2, ll. 25-30).

Snyder discloses a two knuckled, horizontally adjustable mortised hinge as part of a slab/door assembly (Snyder, col. 2, ll. 54-60, col. 3, ll. 53-61).

Taber discloses the application of a sealant to selected surface portions of parts to be sealed to effect a seal between the parts at the portions where the sealant was applied. (Taber Abstract and col. 1, ll. 5-9).

Our understanding how doors are hung is that shims are used to compensate for space at the mount thereby allowing the door to be made plumb with the frame.

PRINCIPLES OF LAW

A claimed invention is not patentable if the subject matter of the claimed invention would have been obvious to a person having ordinary skill in the art. 35 U.S.C. § 103(a); *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 82 USPQ2d 1385 (2007); *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 148 USPQ 459 (1966).

Facts relevant to a determination of obviousness include (1) the scope and content of the prior art, (2) any differences between the claimed invention and the prior art, (3) the level of skill in the art and (4) any relevant objective evidence of obviousness or non-obviousness. *KSR*, 127 S. Ct. at 1734, 82 USPQ2d at 1389, *Graham*, 383 U.S. at 17-18.

A person having ordinary skill in the art uses known elements and process steps for their intended purpose. *Anderson's-Black Rock, Inc. v. Pavement Salvage Co.*, 396 U.S. 57, 60, 163 USPQ 673, 674 (1969) (radiant-heat burner used for its intended purpose in combination with a spreader and a tamper and screed);

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Sakraida v. AG Pro, Inc., 425 U.S. 273, 282, 189 USPQ 449, 453 (1976) (the involved patent simply arranges old elements with each performing the same function it had been known to perform); *Dunbar v. Myers*, 94 U.S. 187, 195 (1876) (ordinary mechanics know how to use bolts, rivets and screws and it is obvious that any one knowing how to use such devices would know how to arrange a deflecting plate at one side of a circular saw which had such a device properly arranged on the other side).

When multiple prior art references are used to reject a claim, then the prior art references should be “analogous.” Prior art is “analogous” when a person having ordinary skill in the art would consider it relevant or related to the invention sought to be patented. *Dann v. Johnston*, 425 U.S. 219, 229 (1976) (data processing system used in large business organization found to analogous to inventor's data process system used in banking industry); *Graham v. John Deere Co.*, 383 U.S. 1, 35 (1966) (where inventor was attempting to solve mechanical closure problem, liquid containers having pouring spouts found to be analogous to an inventor's pump spray insecticide bottle cap); *Cuno Engineering Corp. v. Automatic Devices Corp.*, 314 U.S. 84, 91-92 (1941) (thermostat to break circuit in an electric heater, toaster or iron found to be analogous to a circuit breaker used in an inventor's cordless cigar lighter); *Mast, Foos & Co. v. Stover Mfg. Co.*, 177 U.S. 485, 493 (1900) (device used in mills other than windmills held to be analogous to inventor's use of same device in windmills); *In re Oetiker*, 977 F.2d 1443, 1446, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992) (if art is in the field of applicant's endeavor or is reasonably pertinent to the particular problem with which an inventor is

concerned, then the art is “analogous”).

The criteria for combining references is not the number of references, “but what they would have meant to a person of ordinary skill in the field of the invention.” *In re Gorman*, 933 F.2d 982, 986, 18 USPQ2d 1885, 1888 (Fed. Cir. 1991).

ANALYSIS

The Examiner rejected the claims holding that a person having ordinary skill in the art would have found it obvious to use the full frame weather stripping of Fehr along with the horizontal and vertical adjustable hinges of Hellstrom and Snyder, respectively, in the entryway system of Headrick.

We affirm the Examiner’s rejection of claims 1-3 and 8-15 under 35 U.S.C. § 103(a) using the combination of Headrick, Fehr, Hellstrom, and Snyder.

Appellants do not provide substantive arguments as to the separate patentability of claims 2, 3, and 8-15 that depend from claim 1, which is the sole independent claim among those claims. Claims 2, 3, and 8-15 thus fall with claim 1. *See* 37 C.F.R. § 41.37(c)(1)(vii)(2006).

To the extent Appellants’ arguments to claims 47 and 48 are limited only to addressing the improper combining of Fehr and Hellstrom¹ [sic, Headrick], we

¹ The Appeal Brief on page 13 indicates Appellants previously argued the improper combining of Fehr and Hellstrom, but the only previous argument found in the Appeal Brief addresses the improper combining of references with respect to Fehr and Headrick on pages 10-12, but does not reference Hellstrom, so we assume Appellants meant Headrick.

affirm the rejection of these claims for the same reasons as set forth for claims 1-3, 8-15. Claims 47 and 48 thus fall with claim 1.

We affirm the Examiner's rejection of claims 4-7 and 40-44 under 35 U.S.C. § 103(a) using the combination of Headrick, Fehr, Hellstrom, Snyder, and Tabor for the reasons given for our affirmance of the rejection of claims 1-3 and 8-15 under 35 U.S.C. § 103(a) using the combination of Headrick, Fehr, Hellstrom, and Snyder given that the additional reference to Tabor is deemed cumulative to the original combination.

The 35 U.S.C. § 103(a) Combination:

Appellants argue the 35 U.S.C. § 103(a) rejection using the combination of Headrick, Fehr, Hellstrom, and Snyder is improper because "the modifications required to fit the seal of Fehr onto the end cap assembly of Headrick would render the seal of Fehr unsatisfactory for its intended purpose, which is explicitly prohibited under [The Manual of Patent Examining Procedures (MPEP)] § 2143.01" (Appeal Br. 10, 11). However, Appellants seem to confuse what reference is being modified because their focus is on Fehr as the one being modified when in fact the proposed change is to Headrick.² MPEP § 2143.01

² Appellants further confuse the issue by arguing that "combining Fehr with Headrick would prevent the end cap of Fehr from engaging the sill and therefore no seal could be realized" (Appeal Br. 11). But, Fehr does not use end caps, as Appellants correctly assert on previous page 10 of the Appeal Brief, because rather than using end caps, "Fehr provides a form fit, mitered seal joined together by

would appear applicable if the modification would render the prior art invention *being modified* unsatisfactory for its intended purpose, which is not the case here because the Examiner proposes to modify Headrick and not Fehr (Office action 3/23/04, 3). Binding precedent makes clear that an obviousness rejection cannot be overcome by attacking references individually—which is precisely what Appellants are doing. *In re Young*, 403 F.2d 754, 757, 159 USPQ 725, 728 (CCPA 1968).

In rejecting claim 4-7 and 40-44, the Examiner adds Taber to the 35 U.S.C. § 103(a) combination to teach the application of a sealant onto a localized area, such as between the end cap corner keys 38 and the threshold member 18 in Headrick as required by claims 4-7 and 40-44 (Office action 3/23/04, 3-4). In reply, Appellants argue that sealing the ends of the threshold member 18 and the cap corner keys 36 in Headrick using either the selective application of sealant taught by Tabor, or the general use of a seal around the entire frame taught by Fehr would, in either case, hinder the proper function of Headrick which requires fluid communication between the frame member 12 and the end cap 36 (Appeal Br. 12).

We reject this argument because as found *supra*, Fehr discloses that the tank 15e in the threshold member 15 can accumulate and drain environmental water to the exterior of the frame via internal openings P1-P5 without need of channels formed in an end cap corner key (Fehr col. 8, ll. 31-46), in much the same way as Appellants' tank 104 drains water out through internal openings 105, 106 (Specification: 6). We thus conclude a person with ordinary skill in the art would

fusion welding" (Appeal Br. 10).

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have known to use the drain openings P1-P5 of Fehr as a way to drain the tank 27 in Headrick if the side channels 43, 42 in the cap corner keys 39, 39 were sealed against communication with the tank 27.

Finally, Appellants argue in their Reply Brief of December 11, 2006 that the snugger strip 31 of Headrick “provides a friction fit against the outside edge of the threshold cap 29 to wedge the cap securely within the channel 13” whereas the “seal is provided by the flexible door sweep 57 on the bottom of the door.” (Reply Br. 5.) We fail to see merit in this argument because as found *supra*, Headrick discloses that the snugger strip 31 also functions as gasket, e.g., a seal, that helps reduce seepage of rainwater and other moisture at the interface between the threshold cap and the channel wall, e.g., the bottom frame member. (Headrick col. 4, ll. 52-56) As such, the snugger strip 31 meets the requirement of claims 1 and 47 of a seal being positioned along the frame bottom, notwithstanding the continued teaching of this feature in Fehr.

Motivation to Combine

Appellants argue the “Examiner cannot establish obviousness by locating references that describe various aspects of the pending application’s invention without also providing evidence of the motivating force that would lead one skilled in the art to do what the inventor has done.” (Appeal Br. 9.) To the extent that Appellants argue that an *explicit* motivation, suggestion, or teaching in the art is required for a showing of obviousness, that argument has been foreclosed by *KSR Int’l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 82 USPQ2d 1385 (2007). In *KSR*, the

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Court characterized the teaching, suggestion, motivation test as a “helpful insight” but found that when it is rigidly applied, it is incompatible with the Court’s precedents. *KSR*, 127 S. Ct. at 1741, 82 USPQ2d at 1396. The holding in *KSR* makes clear that there is no longer, if there ever was, a rigid requirement for finding a reason to combine teachings of the prior art.

Helpful insights, however, need not become rigid and mandatory formulas; and when it is so applied, the TSM test is incompatible with our precedents. The obviousness analysis cannot be confined by a formalistic conception of the words teaching, suggestion, and motivation, or by overemphasis on the importance of published articles and the explicit content of issued patents. *KSR*, 127 S. Ct. at 1741, 82 USPQ2d at 1396.

Rather, the application of common sense may control the reasoning to combine prior art teachings. *See id.* at 1742, 82 USPQ at 1397. Thus, common sense acquired by everyday experience would dictate that an exterior door be sealed around its entire periphery to prevent water damage to the interior space, and that water collecting in a threshold tank as found in Headrick if sealed along its edges could be drained to the outside environment using internal openings, such as disclosed by Fehr at elements P1-P5.

CONCLUSIONS OF LAW

We conclude Appellants have not shown that the Examiner erred in rejecting claims 1-15, 40-44, 47, and 48 under 35 U.S.C. § 103(a) as unpatentable over the prior art.

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We sustain the rejection of claims 1-3 and 8-13 under 35 U.S.C. 103(a) as being unpatentable over Headrick in view of Fehr, Hellstrom, and Snyder.

We sustain the rejection of claims 4-7 and 40-44 under 35 U.S.C. 103(a) as being unpatentable over Headrick in view of Fehr, Hellstrom, and Snyder as applied to claims 1-3 and 8-13 above, and further in view of Taber.

We sustain the rejection of claims 14 and 15 under 35 U.S.C. 103(a) as being unpatentable over Headrick in view of Fehr, Hellstrom, and Snyder as applied to claims 1-3 and 8-13.

We sustain the rejection of claims 47 and 48 under 35 U.S.C. 103(a) as being unpatentable over Headrick in view of Fehr, Hellstrom, and Kurtz.

DECISION

The decision of the Examiner to reject claims 1-15, 40-44, 47, and 48 over the prior art is AFFIRMED.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv) (2006).

AFFIRMED

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